



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, Idaho 83706-2239 • (208) 373-0550

Dirk Kempthorne, Governor
C. Stephen Allred, Director

October 13, 2000

CERTIFIED MAIL # 7099 3220 0006 2681 7460

Mr. Jason A. Monks
ZiLOG
2601 11th Avenue, No. Ext.
Nampa, ID 83687

RE: T2-000087, ZiLOG, Nampa
Final Tier II Operating Permit No. #027-00056, Boiler #1 Replacement Installation

Dear Mr. Monks:

On July 21, 2000, the Idaho Department of Environmental Quality (DEQ) received a request for revision to a Tier II Operating Permit (OP) from ZiLOG. On August 4, 2000, the application was declared complete.

Based on review of your request, state and federal rules and regulations, and comments received, DEQ finds this project meets the provisions of IDAPA 58.01.01.400 (*Rules for the Control of Air Pollution in Idaho*). Therefore, enclosed is the revised Tier II OP (#027-00056) for the emissions that exist at your facility. As of the date of this letter, the terms and conditions for sources listed in this permit supersede those terms and conditions in Tier II OP (#027-00056), which was issued March 17, 1997.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to the Idaho Department of Health and Welfare Rules, Title 5, Chapter 3, "Rules Governing Contested Case Proceedings and Declaratory Rulings," by filing a petition with the Hearings Coordinator, Department of Environmental Quality, 1410 North Hilton - Boise, Idaho 83706-1255, within thirty-five (35) days of the date of this decision.

If you have any questions regarding the terms or conditions of the enclosed permit, please contact Mr. Thomas Krinke, of the Boise Regional Office, at (208)373-0550.

Sincerely,

Stephen E. West
Regional Administrator
Boise Regional Office

SEW:MD/bm:cm19036.4005 J:\XFER\AIR_PERM\BRO1T2\ZILOG\000056.PL

Enclosure

cc: DEQ State Office
Boise Regional Office
L. Kral, EPA - Region 10

State of Idaho Department of Environmental Quality AIR POLLUTION OPERATING PERMIT GENERAL INFORMATION	<div style="text-align: center;"> PERMIT NUMBER <div style="display: flex; justify-content: center; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> - <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">5</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> AQCR <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> </div> <div style="text-align: center;"> CLASS <div style="border: 1px solid black; padding: 2px 5px;">A</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> </div> <div style="text-align: center;"> SIC <div style="border: 1px solid black; padding: 2px 5px;">3</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> ZONE <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> </div> <div style="text-align: center;"> UTM COORDINATE (km) <div style="border: 1px solid black; padding: 2px 5px;">5</div> <div style="border: 1px solid black; padding: 2px 5px;">3</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> . <div style="border: 1px solid black; padding: 2px 5px;">5</div> , <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="border: 1px solid black; padding: 2px 5px;">8</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> . <div style="border: 1px solid black; padding: 2px 5px;">5</div> </div> </div>	
1. PERMITTEE Zilog, Incorporated		
2. PROJECT Tier II Operating Permit		
3. MAILING ADDRESS 2601 11th Avenue N. Extension	TELEPHONE # (208) 468-2600	COUNTY Canyon
4. CITY Nampa	STATE Idaho	ZIP CODE 83687
5. PERSON TO CONTACT Jason A. Monks	TITLE Sr. EHS Specialist	
6. EXACT PLANT LOCATION North ½ of the Southeast 1/4 of section 14, Township 3 North, Range 2 West		
7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS Semiconductor Manufacturing		
8. PERMIT AUTHORITY This permit is issued according to the <i>Rules for the Control of Air Pollution in Idaho</i> , Section 58.01.01.400 and pertains only to emissions of air contaminants which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit. THIS PERMIT HAS BEEN GRANTED ON THE BASIS OF DESIGN INFORMATION PRESENTED IN THE APPLICATION AND DIVISION OF ENVIRONMENTAL QUALITY'S (DEQ) TECHNICAL ANALYSIS OF THE SUPPLIED INFORMATION. CHANGES IN DESIGN OR EQUIPMENT, THAT RESULT IN ANY CHANGE IN THE NATURE OR AMOUNT OF EMISSIONS, MAY BE A MODIFICATION. MODIFICATIONS ARE SUBJECT TO DEQ REVIEW IN ACCORDANCE WITH SECTION 58.01.01.200 OF THE <i>RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO</i> . DISCLAIMER: This document may serve as a Preliminary Inspection Finding Form for use by Department personnel in communicating your compliance status upon inspection. It does not constitute a final determination of compliance status with the Idaho Code or any rules promulgated, permits issued, or consent or judicial orders entered into pursuant to the law. The Idaho Department of Environmental Quality reserves the right to supplement this document with additional compliance determinations, and amend, change, or otherwise modify any compliance determination stated in this document. This document in no way restricts the state of Idaho, Department of Environmental Quality from taking any action available under law to address past, present, or future violations of the laws administered by the agency.		
 ADMINISTRATOR, BOISE REGIONAL OFFICE DEPARTMENT OF ENVIRONMENTAL QUALITY		ISSUED DATE <u>October 13, 2000</u> EXPIRATION DATE <u>October 13, 2002</u>

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

Permittee: Zilog, Incorporated
 Project: Tier II Operating Permit
 Location: Nampa, Idaho
 Source: Buildings 1 & 2 (MOD I & MOD II)

PERMIT NUMBER

0	2	7	-	0	0	0	5	6
---	---	---	---	---	---	---	---	---

FOR DEQ USE ONLY

IN	OU	PE	UN
----	----	----	----

1. EMISSION LIMITS

1.1 Emergency Generators

Emissions of oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) from each emergency generator located at Building 1 (NB1) and Building 2 (NB2) shall not exceed any corresponding emission rate limit listed in Appendix A.

1.2 Boilers

Emissions of oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) from the common stack on Boilers #1, #2, and #3 at NB1, and Boilers #1 and #2 at NB2 shall not exceed any corresponding emission rate limit listed in Appendix A.

1.3 Buildings 1 and 2

Emissions of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) from NB1 and NB2, excluding emissions of volatile organic compounds (VOCs) from equipment listed in Sections 1.1 and 1.2 shall not exceed any corresponding emission rate limit listed in Appendix A.

2. OPERATING REQUIREMENTS

2.1 Emergency Generators -- Hours of Operation

The hours of operation of each emergency generator located at NB1 and NB2 shall not exceed seventeen (17) hours per month, nor shall it exceed 200 hours per year for maintenance. These limits excludes operation during periods of power outages to the facility.

2.2 Chemical Usage

2.2.1 Total calculated pounds of VOCs used minus total calculated pounds of VOCs shipped as hazardous waste shall not exceed 16,196 pounds per calendar month and 129,559 pounds per year, based on a twelve (12) month rolling total.

2.2.2 No Permit to Construct pursuant to IDAPA 58.01.01.200 et seq., is required for physical changes and/or changes in the method of operation in NB1 and NB2, excluding changes to combustion equipment listed in Sections 1.1 and 1.2 of this permit, so long as the following conditions are met:

- a) Emissions of volatile organic compounds (VOCs) from NB1 and NB2 shall not exceed the emission rate listed in Appendix A.

Inspection Comments:

ISSUED DATE: October 13, 2000
 EXPIRATION DATE:

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

Permittee: Zilog, Incorporated
Project: Tier II Operating Permit
Location: Nampa, Idaho
Source: Buildings 1 & 2 (MOD I & MOD II)

PERMIT NUMBER

0	2	7	-	0	0	0	5	6
---	---	---	---	---	---	---	---	---

- b) The physical changes and/or changes in the method of operation in NB1 and NB2 shall be subject to Sections 2, 3, and 4 of this permit.
- c) The physical changes in and/or changes in the method of operation shall comply with all applicable requirements, including, but not limited to, volatile organic compounds (VOC) subject to IDAPA 58.01.01.210 of *Rules for the Control of Air Pollution in Idaho*; and
- d) The physical changes and/or changes in the method of operation, that increase any air pollutant other than volatile organic compounds (VOCs), shall comply with IDAPA 58.01.01.220 through 225 of *Rules for the Control of Air Pollution in Idaho*.

3. MONITORING REQUIREMENTS

3.1 Emergency Generator Hours of Operation

The Permittee shall maintain a written log of all times when the emergency generator is operating for both maintenance and emergency periods. The duration of generator operation, as well as reason for operation, shall be recorded.

3.2 Chemical Usage Data

On a monthly basis, the Permittee shall monitor and record the following parameters about each chemical used.

- 3.3.1 Chemical name;
- 3.3.2 Name of each component of each chemical;
- 3.3.3 Decimal percent by weight composition of each constituent of each chemical;
- 3.3.4 Bottle size, in pounds (lbs.), of each chemical;
- 3.3.5 Number of bottles of each chemical used; and

Inspection Comments:

ISSUED DATE: October 13, 2000
EXPIRATION DATE:

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

Permittee: Zilog, Incorporated
 Project: Tier II Operating Permit
 Location: Nampa, Idaho

PERMIT NUMBER

0	2	7	-	0	0	0	5	6
---	---	---	---	---	---	---	---	---

Source: Buildings 1 & 2 (MOD I & MOD II)

FOR DEQ USE ONLY

IN	OU	PE	UN
----	----	----	----

3.3 Hazardous Waste Analysis Data

3.3.1 The Permittee shall record the percent by weight water content of each shipment of hazardous waste generated that contains VOC.

3.3.2 The Permittee shall record the mass, in lbs., of each shipment of hazardous waste generated that contains VOC. Mass shall be determined by multiplying the actual density of the hazardous waste shipment by the volume of the shipment if the mass of the shipment is not directly measured. If the mass is not directly measured, the density and volume of the hazardous waste shipment shall be recorded.

3.4 Determination of Mass of Constituents Used and Shipped as Hazardous Waste

For each month of the time period for which the hazardous waste identified in Section 3.3.1 of this permit was collected and for each constituent of each chemical used, the Permittee shall perform the calculations included in, and record the result of, the following equations using the actual water content of the hazardous waste:

$$3.4.1 \quad M_{\text{CONSTITUENT USED}} = \% \text{COMPOSITION} * M_{\text{BOTTLE}} * \# \text{BOTTLES}$$

where:

$M_{\text{CONSTITUENT USED}}$ = mass, in lbs., of each chemical constituent containing VOCs used;

$\% \text{COMPOSITION}$ = decimal percent by weight composition of each constituent of each chemical;

M_{BOTTLE} = bottle size, in pounds (lbs.), of each chemical;

$\# \text{BOTTLES}$ = number of bottles of used;

$$3.4.2 \quad P_{\text{CONSTITUENT}} = (M_{\text{CONSTITUENT USED}} \div M_{\text{TOTAL USED}})$$

where:

$P_{\text{CONSTITUENT}}$ = calculated decimal percentage of chemical constituent containing VOCs used found in hazardous waste;

$M_{\text{TOTAL USED}}$ = total mass, in lbs., of chemicals used found in the hazardous waste;

Inspection Comments:

ISSUED DATE: October 13, 2000
 EXPIRATION DATE:

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

Permittee: Zilog, Incorporated
 Project: Tier II Operating Permit
 Location: Nampa, Idaho
 Source: Buildings 1 & 2 (MOD I & MOD II)

PERMIT NUMBER

0	2	7	-	0	0	0	5	6
---	---	---	---	---	---	---	---	---

FOR DEQ USE ONLY

IN	OU	PE	UN
----	----	----	----

$ER_{TOTAL\ HAP}$ = Sum of HAP emission rates of all constituent of all chemicals used, in lbs. per month.

$\sum ER_{VOC\ HAP\ CONSTITUENT}$ = Sum of VOC HAP emission rates of all constituent of all chemicals used, in lbs. per month.

3.7 VOC and HAP Emissions - Preliminary Determination

For each month of the time period prior to when hazardous waste identified in Section 3.3 of this permit is collected, the Permittee shall perform the calculations included in Sections 3.4, 3.5, and 3.6 of this permit using the mass and water content data from the most recent hazardous waste shipment. The Permittee shall record monthly the result of each of the equations in Section 3.4 of this permit.

4. REPORTING AND RECORDKEEPING REQUIREMENTS

4.1 Exceedance Report

The Permittee shall report any exceedances of any limits set in Section 2 of this permit to the Idaho Department of Environmental Quality (DEQ) within a reasonable time of discovering the exceedance. Included with this report shall be a description of any corrective action taken to remedy the cause of the exceedance.

4.2 Emergency Generators

The Permittee shall record, in a monthly report, the information requested in Section 3.1 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

4.3 Chemical Usage, Waste Generated, and VOC and HAP Emissions

The Permittee shall record, in a monthly report, the information requested in Sections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of this permit. This report shall be maintained on file by the Permittee for the most recent five (5) year period and made available to DEQ representatives upon request.

Inspection Comments:

ISSUED DATE: October 13, 2000
 EXPIRATION DATE:

0	2	7
---	---	---

 -

0	0	0	5	6
---	---	---	---	---

MD:bm 9038-4005 J:\XFER\AIR PERM\BROIT2\ZILGW000056.PMT

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

Permittee: Zilog, Incorporated
 Project: Tier II Operating Permit
 Location: Nampa, Idaho

PERMIT NUMBER

0 2 7 - 0 0 0 5 6

Source: Buildings 1 & 2 (MOD I & MOD II)

FOR DEQ USE ONLY

IN OU PE UN

APPENDIX A

ZILOG, INCORPORATED - NAMPA

EMISSION LIMITS^a -- MONTHLY (lb/month) AND ANNUAL^b (ton/yr)

SOURCE DESCRIPTION	NO _x		VOC		HAP	
	lb/month	T/yr	lb/month	T/yr	lb/month	T/yr
Building 1, Boilers #1-#3 Common Stack	1452	8.71	77	0.46	--	--
Building 1, Emergency Generator #1	271	1.60	7	0.042	--	--
Building 1, Emergency Generator #2	605	3.56	16	0.09	--	--
Building 2, Boiler #1	612	3.67	47	0.28	--	--
Building 2, Boiler #2	612	3.67	47	0.28	--	--
Building 2, Emergency Generator #1	605	3.56	16	0.095	--	--
Building 2, Emergency Generator #2	742	4.36	20	0.12	--	--
Buildings 1 & 2	--	--	17,272	69.09	2,426	9.70

- a As determined by a pollutant specific promulgated U.S. EPA method, or DEQ approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.
- b As determined by multiplying the actual or allowable (if actual is not available) pound per month emission rate by the actual months per twelve month period that the process operates.

Inspection Comments:

ISSUED DATE: October 13, 2000
 EXPIRATION DATE:

FOR DEQ USE ONLY

[illegible]

- A. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code 39-101 et. seq.
- B. The Permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
- C. The Permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
 - 1) To enter upon the Permittee's premises where an emission source is located, or in which any records are required to be kept under the terms and conditions of this permit; and
 - 2) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emission testing (i.e., performance tests) in conformance with state approved or accepted EPA procedures when deemed appropriate by the Director.
- D. Except for data determined to be confidential under Section 9-342A, *Idaho Code*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Department of Environmental Quality.
- E. Nothing in this permit is intended to relieve or exempt the Permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- F. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.
- G. This permit shall be renewable on the expiration date, provided the Permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within sixty (60) days after receipt of the Director's request shall cause the permit to be voided.
- H. The Director may require the Permittee to develop a list of Operation and Maintenance Procedures to be approved by DEQ. Such list of procedures shall become a part of this permit by reference, and the Permittee shall adhere to all of the operation and maintenance procedures contained therein.
- I. Performance tests (i.e.; air emission source tests) conducted pursuant to testing requirements in this permit must be conducted in accordance with IDAPA 58.01.01.157. Such testing shall not be conducted on weekends or state holidays unless the Permittee obtains prior DEQ approval.

The Permittee shall submit a proposed test date for **each** performance test required by this permit to DEQ for approval at least fifteen (15) days prior to each respective test date (including each test date for periodic tests such as, for example, annual tests). The Permittee shall promptly notify DEQ of any change in the proposed test date and shall provide at least five (5) working days advanced notice prior to conducting any rescheduled test, unless DEQ approves a shorter notice period.

Within thirty (30) days of the date on which a performance test required by this permit is concluded, the Permittee shall submit to DEQ a performance test report for the respective test. The performance test report shall include any and all process operating data required to be recorded during the test period as well as the test results, raw test data, and associated documentation.

Inspection Comments:

ISSUED DATE: October 13, 2000
EXPIRATION DATE:

IN	OU	PE	UN
----	----	----	----

[illegible]

J. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

ISSUED DATE: October 13, 2000
EXPIRATION DATE: